Table 4. List of descriptors for Potato

Descriptor number	Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
1	Accession number		Acquisition		
Morphological d		La	I-1	1	lo n
2	Plant Growth Habit	1 Erect	Flowering time	Modified previous descriptor state*	0 Erect
		2 Semi-erect		state	1 Semi-erect
		3 Decumbent			2 Decumbent
		4 Prostrated			3 Prostrated
		5 Semi-rosette			4 Semi-rosette
		6 Rosette			5 Rosette
3	Leaf dissection type	1 Entire	Flowering time	Modified previous descriptor	0 Entire leaves
				state*	
		2 Lobed			1 Lobed leaves
		3 Dissected			2 Dissected leaves
4	Lateral leaflet number	0 Absent	Flowering time		
		1 One pair			
		2 Two pairs			
		3 Three pairs			
		4 Four pairs			
		5 Five pairs			
		6 Six pairs			
		7 Seven or more pairs			
5	Interjected leaflet	0 Absent	Flowering time		
	number in the rachis among lateral leaflets				
		1 One pair			
		2 Two pairs			
		3 Three pairs			
		4 Four or more pairs			
6	Interjected leaflets on	0 Absent	Flowering time		
	the petiolules				
		1 One pair			
		2 Two pairs			
		3 Three pairs			
		4 Four or more pairs			
7	Stem pigmentation	1 Green stem	Flowering time		
		2 Green stem with few pigmented			
		spots			
		3 Green stem with many pigmented	i		
		spots			
		4 Pigmented stem with many green	l.		
		spots			
		5 Pigmented stem with few green			
		spots			
		6 Red stem	ļ		
	1	7 Purple stem	<u></u>		
8	Stem wing shape	0 Absent	Flowering time	Modified previous descriptor	1 Absent
			1	state*	0.0.11.
		1 Straight	ļ		2 Straight wings
		2 Ondulated	1		3 Ondulated wings
	Plana i	3 Dented	El		4 Dented wings
9	Flowering degree	0 Absent	Flowering time		
		1 Flower buds fall down			
		3 Scarce			
		5 Moderate			
10	C 11 1	7 Profuse	TT1		
10	Corolla shape	1 Stellate	Flowering time	 	
		3 Semi-stellate	1	 	
		5 Pentagonal 7 Rotate	1	 	
			1		
11	Predominant flower	9 Very rotate	Flowering time		
	colour	In parenthesis, light, intermediate	Flowering time		
	Coloui	or intense colour grades given - RHS codes			
		1 White (155D, 10C, 5A)	+		
		2 Red-pink (65D, 68D, 57C)	+		
		3 Red-purple (61C, 67A, 71B)	 		
		4 Light blue (108A, 109D, 110B)	+		
		5 Blue-purplish (107A, 105B,	 		
		102B)			
		6 Lilac (76C, 84B, 86D)	1		
		7 Purple (72A, 77A, 81A)	+		
			1	1	1
			i		
12	Intensity of	8 Violet (83B, 86A, 89A)	Flowering time		i e
12	Intensity of predominant flower colour	8 Violet (83B, 86A, 89A) 1 Light	Flowering time		
12		1 Light	Flowering time		
12	predominant flower	1 Light 2 Intermediate	Flowering time		
	predominant flower colour	1 Light 2 Intermediate 3 Intense		Modified previous descriptor	1 Absent
12	predominant flower colour Secondary flower	1 Light 2 Intermediate	Flowering time	Modified previous descriptor	1 Absent
	predominant flower colour	1 Light 2 Intermediate 3 Intense 0 Absent		Modified previous descriptor state*	
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White			2 White
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White 2 Red-pink			2 White 3 Red-pink
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White 2 Red-pink 3 Red-purple			2 White 3 Red-pink 4 Red-purple
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White 2 Red-pink 3 Red-purple 4 Light blue			2 White 3 Red-pink 4 Red-purple 5 Light blue
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White 2 Red-pink 3 Red-purple 4 Light blue 5 Blue			2 White 3 Red-pink 4 Red-purple 5 Light blue 6 Blue
	predominant flower colour Secondary flower	1 Light 2 Intermediate 3 Intense 0 Absent 1 White 2 Red-pink 3 Red-purple 4 Light blue			2 White 3 Red-pink 4 Red-purple 5 Light blue

Descriptor number	Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
14	Distribution of secondary flower color	0 Absent	Flowering time	Modified previous descriptor state*	1 Absent
		1 On the upper side of the acumen			2 On the upper side of the acumen
		2 On the lower side of the acumen			3 On the lower side of the
					acumen
		3 On both sides of the acumen			4 On both sides of the acume
		4 On the upper side of the start			5 On the upper side of the sta
		5 Bands on the upper side			6 Bands on the upper side
		6 Bands on the lower side			7 Bands on the lower side
		7 Bands on both sides			8 Bands on both sides
		8 Stipples			9 Stipples
		9 Spots (very few)			10 Spots (very few)
15	Anther pigmentation	0 Without anthocyanin	Flowering time	Modified previous descriptor state*	1 Without anthocyanin
		1 Red stripes		state	2 Red stripes
		2 Red tips			3 Red tips
		3 Red tips and bands			4 Red tips and bands
		4 Almost red-brown anthers			5 Almost red-brown anthers
16	Pistil pigmentation	0 Without anthocyanin	Flowering time	Modified previous descriptor state*	1 Without anthocyanin
		1 Pigmented stigma			2 Pigmented stigma
		2 Pigmented ovary			3 Pigmented ovary
		3 Pigmented ovary wall		1	4 Pigmented ovary wall
		4 Pigmented stigma and ovary		1	
					5 Pigmented stigma and ova
		5 Pigmented stigma and ovary wall			6 Pigmented stigma and ova wall
		6 Pigmented ovary and ovary wall			7 Pigmented ovary and ovar wall
		7 Pigmented stigma, ovary and			8 Pigmented stigma, ovary a
		ovary wall 8 Pigmented style			ovary wall 9 Pigmented style
17	Calyx pigmentation	1 Green	Flowering time	Modified previous descriptor state*	0 Green
		2 Green with few pigmented spots		succ	1 Green with few pigmented
		3 Green with many pigmented			spots 2 Green with many pigmente
		spots 4 Pigmented with many green spots			spots 3 Pigmented with many gree
					spots
		5 Pigmented with few green spots			4 Pigmented with few green spots
		6 Reddish 7 purple			5 Reddish
18	Pedicel pigmentation	1 Green	Flowering time		6 purple
18	Pedicei pigmentation	2 Green with pigmented	Flowering time		
		articulation 3 Slightly pigmented and green			
		articulation			
		4 Slightly pigmented with pigmented articulation			
		5 Pigmented only above the articulation			
		6 Pigmented only below the			
		articulation 7 Mostly pigmented and green			
		articulation			
		8 Totally pigmented			
19	Fruit colour	1 Green	Fructification time	2	
		2 Green with few white spots			
		3 Green with white stripes			
		4 Green with abundant white spots			
		5 Green with purple spots			
		6 Green with purple stripes			
		7 Predominantly purple			
20	Fruit shape	1 Globular	Fructification time	<u>.</u>	
20	. run snape	2 Globular mucronated	. rucuricauOii tillit	ī	1
					-
		3 Ovoid			+
	I	4 Ovoid mucronated		-	ļ
		5 Conical			
					1
		6 Long conical			
		6 Long conical 7 Pyriform			
21	Predominant tuber skin	6 Long conical 7 Pyriform In parenthesis, light, intermediate	immediately after		
21	Predominant tuber skin colour	6 Long conical 7 Pyriform	immediately after tuber harvest		
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes I white -cream (158D, 159C,			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D) 7 Purplish-red (58A, 60B, 61A)			
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D) 7 Purplish-red (58A, 60B, 61A) 8 Purple (77A, N79B, 83A)			
	colour	6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D) 7 Purplish-red (58A, 60B, 61A) 8 Purple (77A, N79B, 83A) 9 Blackish (202C, 202B, 202A)	tuber harvest		
21		6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D) 7 Purplish-red (58A, 60B, 61A) 8 Purple (77A, N79B, 83A) 9 Blackish (202C, 202B, 202A) 1 Light			
	colour Intensity of	6 Long conical 7 Pyriform In parenthesis, light, intermediate or intense colour grades given - RHS codes 1 white -cream (158D, 159C, 159A) 2 Yellow (4C, 9B, 14A) 3 Orange (16A, 21B, 23A) 4 Brownish (164D, 164C, 164B) 5 Pink (36D, 36B, 37D) 6 Red (42A, 45C, 53D) 7 Purplish-red (58A, 60B, 61A) 8 Purple (77A, N79B, 83A) 9 Blackish (202C, 202B, 202A) 1 Light	tuber harvest		

number 23	Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
23	Secondary tuber skin	0 Absent		Modified previous descriptor	1 Absent
	colour	1 White-cream	tuber harvest	state*	2 White-cream
		2 Yellow			3 Yellow
		3 Orange			4 Orange
		4 Brownish			5 Brownish
		5 Pink			6 Pink
		6 Red			7 Red
		7 Purplish-red			8 Purplish-red
		8 Purple			9 Purple
		9 Blackish			10 Blackish
24	Distribution of	0 Absent	immediately after	Modified previous descriptor	1 Absent
	secondary skin tuber		tuber harvest	state*	
	colour	1 In the eyes			2 In the eyes
		2 In the eyebrows			3 In the eyebrows
		3 In area around the eyes			4 In area around the eyes
		(splashed)			(splashed)
		4 In scattered areas			5 In scattered areas
		5 In area around the eyes			6 In area around the eyes
		(spectacled)			(spectacled)
		6 Spots uniformly distributed			7 Spots uniformly distributed
		(stippled)			(stippled)
		7 Few Spots (very few)			8 Spots (very few)
25	Tuber outline	1 Compressed tubers	immediately after		
			tuber harvest		
		2 Rounded tubers			
		3 Ovoid tubers			
		4 Obovoid tubers			
		5 Elliptical tubers			
		6 Oblong tubers			
		7 Long-oblong tubers			
		8 Elongated tubers			
26	Odd tuber shapes	0 Absent	immediately after	Modified previous descriptor	1 Absent
	•		tuber harvest	state*	
		1 Flattened			2 Flattened
		2 Clavated			3 Clavated
		3 Reniformed			4 Reniformed
		4 Fusiformed			5 Fusiformed
		5 Falcated			6 Falcated
		6 Coiled			7 Coiled
		7 Digitated			8 Digitated
		8 Concertina-shaped			9 Concertina-shaped
		9 Tuberosed			10 Tuberosed
27	Depth of eyes	1 Protruding eyes	immediately after		
			tuber harvest		
		3 Shallow eyes			
		5 Slightly deep eye			
		7 Deep eyes			
		9 Very deep eyes			
28	Predominant tuber flesh	1 White (155D)	immediately after		
	colour (refer RHS		tuber harvest		
	Colour Codes)	2 Cream (158D)			
		3 Pale yellow (4C)			
		4 Yellow (9B)			
		5 Intense yellow (14A)			
		6 Red (60B)			
	1	7 Purple (N79B)			
		8 Violet (83A)			
		0 Absent	11 1 6		
29	Secondary tuber flesh	O Absciit		Modified previous descriptor	1 Absent
29	Secondary tuber flesh colour		tuber harvest	Modified previous descriptor state*	
29		1 White			2 White
29		1 White 2 Cream			2 White 3 Cream
29		1 White 2 Cream 3 Pale yellow			2 White 3 Cream 4 Pale yellow
29		1 White 2 Cream 3 Pale yellow 4 Yellow			2 White 3 Cream 4 Pale yellow 5 Yellow
29		1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow			2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow
29		1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red			2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red
29		1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple			2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple
	colour	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet	tuber harvest	state*	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet
29	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple	tuber harvest	state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple
	colour	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent	tuber harvest	state*	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent	tuber harvest	state* Modified previous descriptor	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas	tuber harvest	state* Modified previous descriptor	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring	tuber harvest	state* Modified previous descriptor	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring	tuber harvest	state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulls	tuber harvest	state* Modified previous descriptor	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular ring and mer
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulls 6 In all flesh except medulla	tuber harvest	state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular ring and mec 7 In all flesh except medulla
	colour Distribution of	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medull; 6 In all flesh except medulla 7 In spots uniformly distributed	tuber harvest	state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular rine and mer 7 In all fleshe except medulla 8 In spots uniformly distribute
30	Distribution of secondary flesh colour	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulle 6 In all flesh except medulla 7 In spots uniformly distributed (stippled)	immediately after	state* Modified previous descriptor state*	2 White 2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 6 In the vascular ring and mec 7 In all flesh except medulla 8 In spots uniformly distribute (stippled)
	Distribution of secondary flesh colour	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medull; 6 In all flesh except medulla 7 In spots uniformly distributed	tuber harvest	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular rine and mey 7 In all fleshe except medulla 8 In spots uniformly distribut
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D)	immediately after	state* Modified previous descriptor state*	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 7 In all flesh except medulla 8 In spots uniformly distribute (stippled) 1 Sprouts white (158D)
30	Distribution of secondary flesh colour	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring and medulla 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulle 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B) 3 Sprouts red (58A)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B) 4 Purple (N79B)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B) 3 Sprouts red (58A) 4 Sprouts purple (N79B)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulla 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B) 4 Purple (N79B) 5 Violet (83 A)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribute (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B) 3 Sprouts red (58A) 4 Sprouts youlet (83 A)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulle 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B) 4 Purple (N79B) 5 Violet (83 A) 6 Blackish (202A)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B) 3 Sprouts red (58A) 4 Sprouts purple (N79B) 5 Sprouts violet (83 A) 6 Sprouts black (202A)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS Color Codes)	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B) 4 Purple (N79B) 5 Violet (83 A) 6 Blackish (202A) 7 Yellow (4C)	immediately after tuber harvest	Modified previous descriptor state* Modified previous descriptor state* Modified previous descriptor state*	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts pink (36B) 3 Sprouts pink (36B) 3 Sprouts red (58A) 4 Sprouts purple (N79B) 5 Sprouts violet (83 A) 7 Sprouts yellow (4C)
30	Distribution of secondary flesh colour Predominant sprout colour (refer RHS	1 White 2 Cream 3 Pale yellow 4 Yellow 5 Intense yellow 6 Red 7 Purple 8 Violet 0 Absent 1 Scattered spots 2 Scattered areas 3 In a narrow vascular ring 4 In a broad vascular ring 5 In the vascular ring and medulle 6 In all flesh except medulla 7 In spots uniformly distributed (stippled) 1 White (158D) 2 Pink (36B) 3 Red (60B) 4 Purple (N79B) 5 Violet (83 A) 6 Blackish (202A)	immediately after	state* Modified previous descriptor state* Modified previous descriptor	2 White 3 Cream 4 Pale yellow 5 Yellow 6 Intense yellow 7 Red 8 Purple 9 Violet 1 Absent 2 Scattered spots 3 Scattered areas 4 In a narrow vascular ring 5 In a broad vascular ring 6 In the vascular ring and mer 7 In all flesh except medulla 8 In spots uniformly distribut (stippled) 1 Sprouts white (158D) 2 Sprouts pink (36B) 3 Sprouts red (58A) 4 Sprouts purple (N79B) 5 Sprouts violet (83 A) 6 Sprouts black (202A)

Dogowinton	Decominations	Descriptor state	Describing store	Domonko	Duorious descriptore states
Descriptor number	Descriptors	Descriptor state	Recording stage	Kemarks	Previous descriptors state*
number		2 Pink	1		3 Pink
		3 Red			4 Red
		4 Purple			5 Purple
		5 Violet			6 Violet
33	Distribution of secondary sprout	0 Absent	Sprouting time	Modified previous descriptor state*	1 Absent
	colour	1 At the base			2 At the base
		2 At the apex			3 At the apex
		3 Lightly scattered throughout			4 Lightly scattered throughout
		4 Heavily scattered throughout			5 Heavily scattered throughout
		5 In sprout yolk			6 In sprout yolk
34	Ploidy level	2 = 2X = (24 chromosomes)	Sprouting time	New trait added	
		3 = 3X = (36 chromosomes)			
		4 = 4X = (48 chromosomes)			
valuation descr	uintana	5 = 5X = (60 chromosomes)	<u> </u>		L
35	Foliar blights (Alternaria solani, Phytophthora infestan, Phoma sp., Septoria sp.)	on 1-9 scale, where	during plant growth and development	Modified previous descriptor state*	on 1-9 scale, where
	* '	1 Highly resistant			1 Extremely resistant
		3 Resistant			2 Highly resistant
		5 Moderately resistant			3 Very resistant
		7 Susceptible			4 Resistant
		9 Highly susceptible			5 Moderately resistant
					6 Slightly resistant
					7 Moderately susceptible
			ļ		8 Susceptible
	Write (P. 1	10 1 2 72 2 2 2 2 2	ļ		9 Extremely susceptible
36	Wilts (Ralstonia	1-9 scale as for 'Foliar blights'	during plant		
	solanacearum, Fusarium spp., Verticillium albo- atrum, Verticillium dahliae, Rhizoctonia sp.)		growth and development		
37	Tuber diseases	1-9 scale as for 'Foliar blights'	immediately after		
37	(Phytophthora sp., Synchytrium sp., Fusarium sp., Theophora sp., Streptomyces sp.,	17 scare as sor Forms origins	tuber harvest		
	Rhizoctonia sp.)				
38	Bacterial diseases (Erwinia carotovora subsp. atroseptica,	1-9 scale as for 'Foliar blights'	during plant growth and development		
	Pseudomonas wilt)				
39		1-9 scale as for 'Foliar blights'	juvenile plant		
40	Virus- Aster yellow	1-9 scale as for 'Foliar blights'	juvenile plant		
41	Potato virus X	1 Highly resistant	juvenile plant	Modified previous descriptor	H Hypersensitive
			state	state*	
		3 Resistant			I Immune
		5 Moderately resistant			R Resistant
		7 Susceptible			S Susceptible
42	D	G . C . D			T Tolerant
42	Potato virus Y	Scoring as for Potato virus X	juvenile plant		1
43	Potato virus A	Scoring as for 'Potato virus X'	juvenile plant		
44	Nematodes (Meloidogyne sp., Globodera sp., Nacobbus sp.)	Score on 3, 5 & 7 scale, where			
		3 Resistant			
		5 Moderately resistant	1		
	L	7 Susceptible	_	1	
45	Reaction to frost	Score on 1-9 scale, where		Modified previous descriptor state*	Score on 1-9 scale, where
		1 Highly tolerant	+		1 Highly resistant
		3 Tolerant 5 Moderately tolerant	1		3 Resistant
		7 Susceptible	+		5 Slightly resistant 7 Susceptible
		9 Extremely susceptible	†		9 Extremely susceptible
46	Reaction to drought	Scoring as for Reaction to frost	+		, and mery susceptible
47	Reaction to heat	Scoring as for Reaction to frost	1		1
48	Stem solidity	1 Solid	To be recorded in the upper half of the stem with fully expanded leaves. Even a narrow hole means hollow, otherwise solid.	New trait added	
49	Leaf structure	1 Closed	To be recorded	New trait added	1
49	Leaf structure	1 Closed	To be recorded on fully grown leaf in upper part	riew trait added	
		2 Medium	of the stem		

	Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
number				70 P I	
	Anthornomic to black	3 Open (In fig.)	To be seened a	New trait added	
50		0 Absent		New trait added	
	young leaflets at apical rosette		"present" if it is		
	rosette		easily visible and		
			present in majority of the		
		1.0	majority of the		
	And consider to so the	1 Present	T-11-12	N	
51	Anthocyanin in rachis	0 Absent		New trait added	
			as "present" it it is		
			easily visible and		
			present in		
			majority of the		
			fully expanded		
	r a . 1	1 Present	m 1 1 1	N	
52	Leaflet shape	1 Narrow lanceolate	To be recorded	New trait added	I
			on fully expanded	A A	A
			leaflets in upper	AN AN AN	AS-12-20
			part of the stem.	RYA ATTA ATTA	ATRA ATRA
		2 Lanceolate		KANDIKA DIKA	[公文公] [经9级]
		3 Ovate-lanceolate	ļ	KAKA KAKA	REAL CONTRACTOR
		4 Ovate	ļ		Strong - And
		5 Oval (In fig.)			
				Any shape between 1 and 2 may	be recorded as 1, that between 2
				and 3, as 2, and so on.	
53	Midrib colour	1 Green only	To be recorded	New trait added	
		2 Anthocyanin present only at the	on fully expanded		
		base of midrib	leaflets in the		
		3 Anthocyanin present throughout	upper part of the		
		the midrib	stem.		
54	Inflorescence type	1 Simple	To be recorded at	New trait added	
	**	•	peak flowering	. 44	
			time of the	於	
			genotype	The Think	
		2 Compound (In fig.)	71	- Cond	
		=			
				A CONTRACTOR OF THE PARTY OF TH	
				- A	
55	Colour of floral stalk	1 Green only	Presence of any	New trait added	
55	Colour of Horar stank	1 Green only	other colour with	The within added	
			or without green,		
			to be recorded as		
			"pigmented".		
		2 Pigmented	pignicited .		
56	Corolla colour	1 White	It is the	New trait added	
30	Corona coloui	1 Wille	predominant	New trait added	
			colour of the		
			COIOUI OI IIIC		
			innar/unnar sida		
			inner/upper side		
			of petals in freshly		
			of petals in freshly and fully opened	,	
		an I i I	of petals in freshly		
		2 Red-violet	of petals in freshly and fully opened		
		3 Blue-violet	of petals in freshly and fully opened flowers		
57	Intensity of corolla		of petals in freshly and fully opened flowers It is to be	New trait added	
57	Intensity of corolla colour	3 Blue-violet	of petals in freshly and fully opened flowers It is to be recorded only for		
57		3 Blue-violet	of petals in freshly and fully opened flowers It is to be recorded only for the coloured	New trait added	
57		3 Blue-violet	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white)	New trait added	
57		3 Blue-violet 1 Weak	of petals in freshly and fully opened flowers It is to be recorded only for the coloured	New trait added	
57		3 Blue-violet 1 Weak 2 Medium	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white)	New trait added	
	colour	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers.	New trait added	
57	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even	New trait added	
	colour	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be	New trait added	
	Anthocyanin of outer	3 Blue-violet 1 Weak 2 Medium 3 Strong	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as	New trait added	
	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as	New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present".	New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present".	New trait added New trait added New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present". Cone with shrivelled anthers or twisted anthers	New trait added New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present". Cone with shrivelled anthers not joining around	New trait added New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present". Cone with shrivelled anthers or twisted anthers or twisted anthers not joining around style in a regular	New trait added New trait added	
58	Anthocyanin of outer side in white flowers	3 Blue-violet 1 Weak 2 Medium 3 Strong 1 Absent	of petals in freshly and fully opened flowers It is to be recorded only for the coloured (other than white) flowers. Presence of even very light colour anywhere on outer side of the petals to be recorded as "present". Cone with shrivelled anthers not joining around	New trait added New trait added	

Descriptor Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
number 60 Stylar length	1 Shorter than stamen column	If stigma is below the anther cone tip it is to be recorded as 'shorter than stamen column'	New trait added	
		irrespective of the pistil morphology. 'Longer than stamen column' means slightly above the anther		
	2 Equal to stamen column	cone tip, and longer than this is to be recorded as 'much longer than stamen column'.		
	3 Longer than stamen column 4 Much longer than stamen colum	n		
61 Stigma lobes	1 Single	This descriptor is replacement of 'stigma shape' of CPRI and CIP descriptors. The classes proposed are easily distinguishable than that was	New trait added	
		possible for those of CPRI and CIP descriptors for this character. Genotypes with tri-lobed stigma though are rare, it a very consistent character when present e.g. in		
		varieties 'Kufri Chandramukhi' and 'Up-to-date'. If more than one class is simultaneously present in		
	2 Bi-lobed 3 Tri-lobed			
62 Premature bud abscission	0 Absent	To be recorded as present even if some buds drop without opening.	New trait added	
63 Colour of eye	1 Present 1 Same as tuber	Classes 2 to 8 are	New trait added	
	2 Pink/red 3 Purple 4 Pink/red but limited to eyebrow 5 Purple but limited to eyebrow 6 Pink/red but scattered randomly all over tuber	relevant only if a colour other than the predominant tuber colour is also present.		
	7 Purple but scattered randomly al over tuber 8 In coloured tubers, area around eye is white			
64 Intensity of ant at base of sprot		To be recorded if base has different colour intensity than main part of the sprout	New trait added	
	2 Medium 3 Dark			
65 Intensity of ant at sprout tip	hocyanin I Light	To be recorded if tip has different colour intensity than main part of the sprout	New trait added	
	2 Medium 3 Dark	+		
66 Sprout shape	1 Bulbous 2 Cylindrical		New trait added	
	3 Conical (In fig.)	****		
67 Pubescence of s	1 Slightly hairy	When hairs are restricted to only a part or are sparse and not easily visible, record "slightly hairy"	New trait added	

Descriptor number	Descriptors	Descriptor state	Recording stage	Remarks	Previous descriptors state*
		2 Hairy		1	